(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 13 October 2005 (13.10.2005)

PCT

(10) International Publication Number WO 2005/096017 A1

(51) International Patent Classification7:

G01V 1/36

(21) International Application Number:

PCT/GB2005/001205

- (22) International Filing Date: 29 March 2005 (29.03.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0407658.4

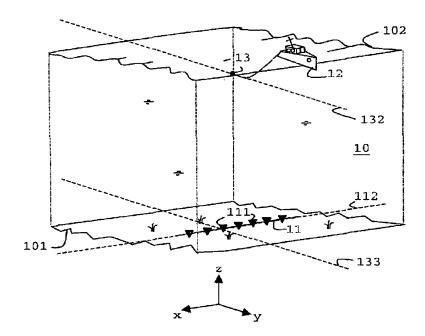
3 April 2004 (03.04.2004) GB

- (71) Applicant (for all designated States except BF, BJ, CA, CF, CG, CI, CM, FR, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, US): WESTERNGECO SEISMIC HOLDINGS LIMITED; Citco Building, P.O. Box 662, Road Town, Tortola (VG).
- (71) Applicant (for CA only): WESTERNGECO CANADA LIMITED [CA/CA]: 237 - 4th Avenue S.W., 30th Floor, Fifth Avenue Place, Calgary, Alberta T2P 4X7 (CA).
- (71) Applicant (for FR only): SERVICES PETROLIERS SCHLUMBERGER [FR/FR]; 42, rue Saint Dominique, F-75007 Paris (FR).

- (71) Applicant (for BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG only): WESTERNGECO LIMITED [GB/GB]; Schlumberger House, Buckingham Gate, Gatwick, West Sussex RH6 0NZ (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): ROBERTSSON, Johan. Olof, Anders [SE/NO]; Sørkedalsveien 61, N-0376 Oslo (NO).
- (74) Agent: MIRZA, Akram, Karim; Intellectual Property Law Department, Schlumberger Cambridge Research Limited, High Cross, Madingley Road, Cambridge CB3 0EL (GB)
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: WAVEFIELD DECOMPOSITION FOR CROSS-LINE SURVEY



(57) Abstract: It is described a method for spatially filtering 3D seabed seismic data acquired in a cross-line geometry including methods of how to decompose the data using a filter with two spatial components.

WO 2005/096017 A1

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- with international search report